

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandra, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,280	09/18/2003	Arihiro Takeda	1117.68338	5624
7590 12/14/2005		EXAMINER		
Patrick G. Burns, Esq. GREER, BURNS & CRAIN, LTD. Suite 2500 300 South Wacker Drive Chicago, IL 60606			DUONG, THOLV	
			ART UNIT	PAPER NUMBER
			2871	
			DATE MAILED: 12/14/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
		,,				
Office Action Summary	10/665,280	TAKEDA ET AL.				
omeenene camma,	Examiner	Art Unit				
The MAILING DATE of this communication app	Thoi V. Duong	2871				
Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 28 No.	ovember 2005.					
2a)⊠ This action is FINAL . 2b)☐ This	This action is FINAL . 2b) This action is non-final.					
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	i3 O.G. 213.				
Disposition of Claims						
4) ☐ Claim(s) 22,23,26,34 and 35 is fare pending in a 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 22,23,26,34 and 35 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.	•				
Application Papers						
9)☐ The specification is objected to by the Examine	r.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No. <u>10/047,216</u> . ed in this National Stage				
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:					

Application/Control Number: 10/665,280 Page 2

Art Unit: 2871

DETAILED ACTION

This office action is in response to the Amendment filed after final on November
 28, 2005.

Accordingly, claim 22 was amended, and claims 1-21, 24, 25 and 27-33 were cancelled. Currently, claims 22, 23, 26, 34 and 35 are pending in this application.

Response to Arguments

2. The final Applicant's arguments filed November 28, 2005, with respect to the rejection(s) of claim(s) 22-26, 24 and 35 have been fully considered and are persuasive. Therefore, the last final rejection has been withdrawn. However, upon further consideration, a new ground(s) of final rejection is made in view of USPN 6,710,837 B1 to Song et al..

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Application/Control Number: 10/665,280

Art Unit: 2871

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 22, 23, 26, 34 and 35 are rejected under 35 U.S.C. 102(e) as being anticipated by Song et al. (Song, USPN 6,710,837 B1).

As shown in Figs. 5, 8, 9, 19 and 20, Song discloses a liquid crystal display device comprising:

a first substrate 10 having thereon a pixel electrode 200 in an active element (Fig. 20C and col. 12, lines 1-10);

a second substrate 20 having thereon an opposed electrode 130 (Figs. 19C-19E); and

a liquid crystal layer interposed between said first and second substrates with said electrodes facing each other (col. 12, lines 15-24),

wherein a first orientation control element 270 and 170 extending in a nonparallel direction relative to an extending direction 222 (Figs. 8A, 8B and 9) of an edge of said pixel electrode 200 and a second orientation control element 171 extending in a parallel direction relative to the extending direction 222 of said edge are provided on at least one of said first and second substrates (col. 7, line 46 through col. 8, line 51),

wherein said first orientation control element 270 and 170 is provided on said first and second substrates 10 and 20 respectively (Figs. 19D and 20C),

wherein, at least a part of liquid crystal molecules 3 of said liquid crystal layer at the vertex of said second orientation control element 171 are orientated in a vertical direction relative to said substrate 20 when voltage is being applied between said pixel and opposed electrodes (see also Figs. 1B and 6 and col. 4, lines 30-39), and

wherein the first orientation control element 270 is a slit formed in said pixel electrode 200 in an oblique direction relative to the extending direction 222 of said edge (Figs. 8A and 8B).

Re claim 23, said second orientation control element 171 is provided on said second substrate 20, and said pixel electrode 200 does not exist on at least a part of a place on said first substrate 200 opposed to said second orientation control element 171 (see portion b in Figs. 8A and 9).

Re claim 26, a dielectric anisotropy of said liquid crystal molecules 3 of said liquid crystal layer is negative (col. 7, lines 5-9).

Re claim 34, said liquid crystal molecules 30 on said second orientation control element 171 are oriented in a non-vertical direction relative to a longitudinal direction of said second orientation control element when no voltage is applied (Fig. 9).

wherein, re claim 35, said liquid crystal molecules 30 on said second orientation control element 171 are oriented in a direction of 45 degrees relative to the longitudinal direction of said second orientation control element (Fig. 9).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

Application/Control Number: 10/665,280

Art Unit: 2871

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Thoi V. Duong whose telephone number is (571) 272-

2292. The examiner can normally be reached on Monday-Friday from 8:30 am to 4:30

pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Robert Kim, can be reached at (571) 272-2293.

Thoi Duong

12/10/2005

A lu selection ANDREW SCHECHTER PRIMARY EXAMINER

Page 5